
Chapter 3

Policies

Chapter Three —Policies

The following policies are designed to achieve the goals identified in Chapter II. Policies are guides to action which direct builders and governmental agencies to achieve community desires in the development of the Cub Run planning area. The generalized Plan Map (Figure 16, Page 32) represents Loudoun County's interpretation of the policies contained in this plan. The map serves as a general development guide. Therefore, final implementation may deviate somewhat from the plan map. Despite minor deviations, the goals will be achieved if the policies are upheld. Thus, an emphasis on goals and policies rather than on a detailed map will permit creativity on the part of the development community and governmental agencies while ensuring that the County's overall goals are achieved.

I. Agricultural Policies

A. Issue Statement and Policy Resolution

Should agricultural land uses be encouraged to continue in the Cub Run planning area?

The County encourages the preservation of precious agricultural soils in part by encouraging concentrated development in areas where soils are not well suited for agricultural use. Although the Cub Run planning area does not offer the County's best agricultural soils, it does offer a number of locational advantages which make it particularly attractive for employment and general business uses. Therefore, the County anticipates and will encourage the orderly conversion of agricultural landholdings in the planning area to employment and general business uses as appropriate utilities become available.

B. Policies

1. The County will encourage the continuation of agricultural uses in the area until such time as

the conversion of farmland to business and employment uses becomes appropriate and is desired by the landowners.

2. The County will continue to make farmland preservation programs available to farmlands in the Cub Run planning area until such time as landowners initiate the development approval process.

II. Residential Community Policies

A. Issue Statement and Policy Resolution

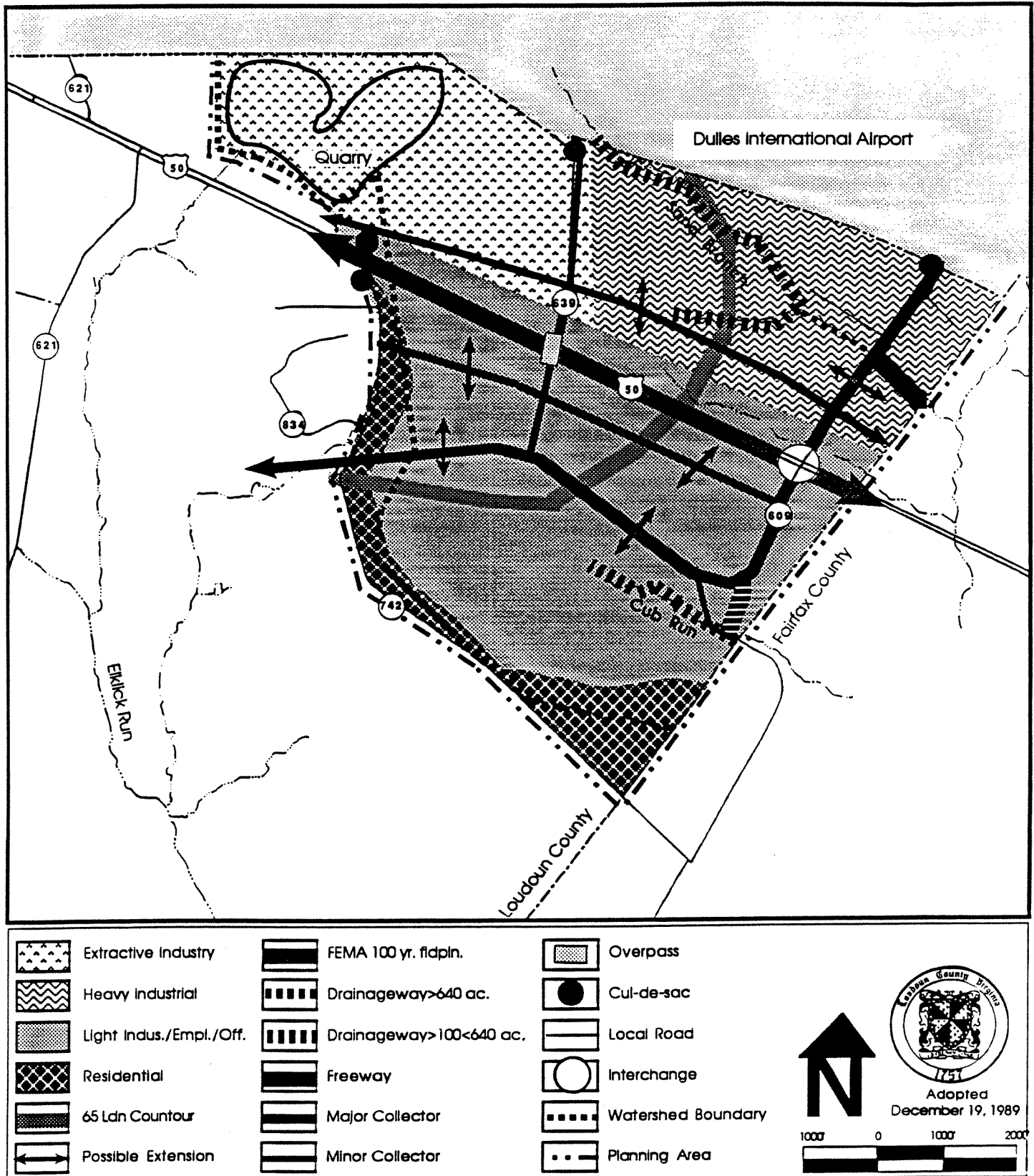
What should be the form, size and densities of new residential communities and where should these be located in the Cub Run planning area?

A blanket of Ldn 65+ (Loudness Day/Night Index) Noise Zones, an active diabase quarry and problem producing soils in the Cub Run planning area limit the desirability and feasibility of the area for future residential development. Therefore, although the County will encourage the protection and preservation of the existing residential communities, further residential development in the Cub Run area will be strongly discouraged.

B. Policies

1. In the Cub Run planning area, the County will not approve rezonings to PDH zoning districts, and will strongly discourage the use of existing R-1 zoning for residential land uses within or adjacent to the projected Ldn 65+ Noise Zones, as measured on the Integrated Noise Model, Mod 3.8, and as shown on Exhibit 15 of the "Final Report, FAR Part 150, Noise Compatibility Program, Washington Dulles International Airport", prepared by Peat, Marwick, Mitchell for the Metropolitan Washington Airports and dated January 1985. (See Figure 15, page 28.)

Plan Map • Figure 16



2. New non-residential development or expansions of existing non-residential land uses should be appropriately screened from existing residences by means of a buffer zone as described in Section III, Policy 9, page 35.

3. The County will encourage rezonings of existing R-1 districts to appropriate zoning districts which are consistent with the goals and policies of this area plan.

III. Employment Policies

A. Issue Statement and Policy Resolution

What types of employment uses are appropriate for the Cub Run planning area and where should such uses be located?

The proximity of the planning area to Dulles International Airport, the Route 28 corridor, and the rapidly developing Fair Oaks area, makes Cub Run an ideal location for a variety of employment uses. Further, the Route 50 corridor provides good access to the area and has the potential to become an attractive, highly visible entrance to the County. These locational amenities, along with the land use limitations imposed by projected noise zones in the area, suggest that a mix of industrially oriented employment uses are particularly appropriate. The County will encourage the development of attractive, light industrial/business park type employment to the south of Route 50. North of Route 50, close to the airport and to the diabase quarry, the County will encourage the location of well screened heavy employment activities (See Figure 17, page 34.)

B. Policies

1. Land located to the south of Route 50 will be designated for a mix of attractive, light industrial office/research and high technology assembly uses.

2. Land located to the north of Route 50 will be designated for a variety of employment uses

ranging from light industrial activities such as manufacturing and warehousing to heavy industrial employment activities such as quarrying or concrete mixing.

3. Land directly bordering Route 50 will be designated for attractive, low intensity employment uses. C-1 parcels located in the Cub Run planning area, but outside the Cub Run Watershed, should be encouraged to rezone to an appropriate light industrial or employment district once sewer and water service is planned by the County for such parcels.

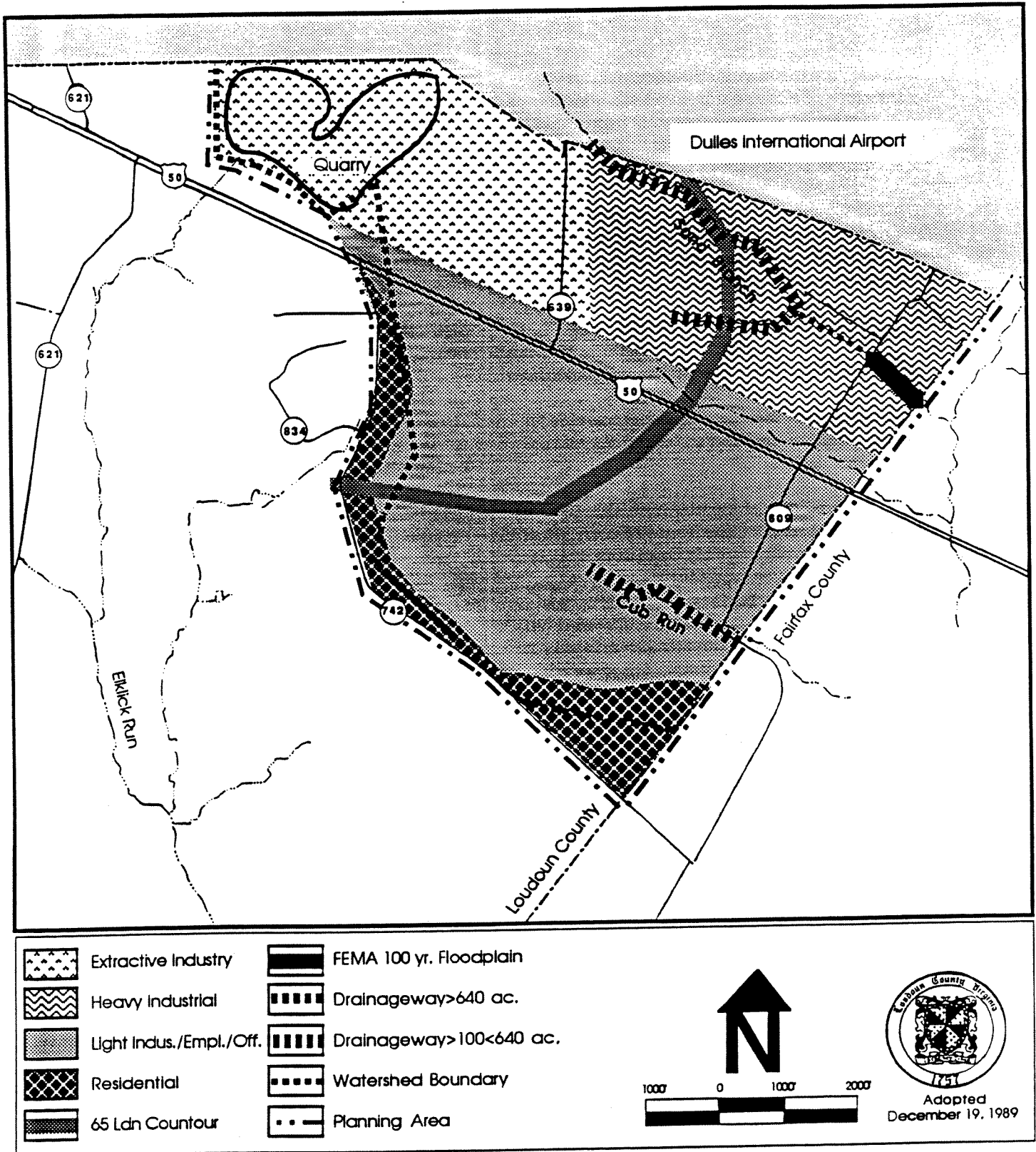
4. Heavy industrial activities should be screened from direct view of residences, public roads and less intensive employment uses by buffers which may include berms, vegetative screening, or other material deemed suitable by the County at the time of rezoning, special exception or site plan review.

5. All portions of structures to be used as offices and lying within the limits of the 65-75 Ldn contour will be developed with building materials and/or with building techniques to achieve interior noise reduction of interior work spaces to Ldn 45. The limits of the projected 65-75 Ldn zones shall be shown on applications for rezoning, special exception, and subdivision plans as well as on all site plans.

6. Special exceptions for non-accessory offices in areas designated for light industrial uses will be considered provided that the maximum permitted floor area ratio for these hybrid office/industrial buildings shall be limited to the extent necessary in order to limit traffic impacts to those which would be generated by PD-IP permitted uses. Additionally, non-accessory office uses allowed by special exception in these hybrid office/industrial buildings shall not exceed 49 percent of the total gross floor space of any single building. Notwithstanding the above, permitted PD-IP uses shall still be allowed at .4 FAR.

7. In order to maintain the character of light industrial districts, special exceptions for non-

Land Use Plan • Figure 17



accessory offices in PD-IP zones will also be subject to specific architectural controls. In particular, hybrid office/industrial buildings will be limited to two stories in height, and must have a minimum of two loading bays, screened or situated so as not to be seen from a public street. Additionally, at least 50 percent of the total gross floor area will have a floor load capacity of at least 125 pounds per square foot live load.

8. Employment industries that may be adversely affected will be discouraged from locating near the area's active quarrying operations or on diabase rock beds which conduct vibrations. The limits of these areas will be determined through subsequent studies by Loudoun County.

9. New nonresidential activities shall be properly screened from existing residences by means of a development buffer zone. In addition to meeting any zoning district minimum yard requirements as detailed in the *Loudoun County Zoning Ordinance*, a buffer zone of 300 feet shall be provided between any nonresidential structure and an existing dwelling unit. Depending on the nature of noise, storage and loading facilities, outdoor lighting etc. associated with a nonresidential use, total visual screening may be required. A landscape plan indicating buffer zone widths, berms, planting and screening materials should be submitted with all such rezoning, special exception and site plan applications.

10. New nonresidential activities shall be properly screened and buffered from Route 50 by means of a minimum 50' development setback, measured from the right-of-way of Route 50. (See Section VII, page 51) Depending on the location of parking, loading and storage facilities, total visual screening may be required. A landscape plan indicating buffer zone widths, berms, planting and screening materials should be submitted with all such rezoning, special exception and site plan applications.

11. Certain ancillary commercial activities serving industrial and/or employment areas such as stationery supply stores, printing shops, or sandwich shops will be encouraged to locate within these developments and will be reached by means of the entrances and roads established to serve employment areas.

IV. Commercial Facilities Policies

A. Issue Statement and Policy Resolution

What kind of commercial facilities will be needed to serve the residential and working populations of the Cub Run planning area? How should these areas be integrated into the overall plan for the area?

Development in the Cub Run planning area is expected and encouraged to be of an industrial/employment nature. Accordingly, the nature of commercial facilities will differ from those typically serving a residential community. Ancillary commercial uses which would serve a working population such as office supply stores, printers, and sandwich shops are encouraged as an integrated part of employment complexes. The existing C-1 zoning* presently located along Route 50 allows for unattractive and unsafe commercial strip development which often precludes optimum land development as it allows development to proceed in an uncoordinated, piecemeal fashion. Therefore, the County encourages the assemblage of small parcels along Route 50 with larger parcels in the area and the subsequent rezoning of these properties to a more appropriate zoning district.

B. Policies

1. The County will not approve rezonings to C-1 or the expansion of existing C-1 districts in the Cub Run planning area.
2. The County will strongly discourage

*Concurrent with the adoption of this plan, the Board of Supervisors created a new LI Zoning District (Zoning Ordinance Amendment 89-04) and rezoned the C-1 properties in the Cub Run subwatershed to that district (ZMAP 89-25).

approval of special exception uses in the C-1 districts in the Cub Run planning area.

3. The County will encourage those properties in the Cub Run planning area currently zoned C-1 to combine with larger tracts and for such tracts to seek rezoning to an appropriate light industrial or employment zoning district as sewer and water is planned by the County for such parcels.

4. A landscape plan indicating buffer zone widths, berms, planting and screening materials should be submitted with any site plan application located in a C-1 district. The County will encourage a minimum 50' building setback along Route 50 for C-1 properties in the planning area.

5. Use of commercial entrances along Route 50 should be discontinued as reverse frontage for commercial properties becomes available. Therefore, applicants submitting site plans in existing C-1 districts in the Cub Run planning area will be encouraged to plan sites and structures which in the future can be served via roads which parallel Route 50. Such plans should include commitments to only temporary access to Route 50.

V. Community Facilities Policies

A. Issue Statement and Policy Resolution

What sort of community facilities should be located in the Cub Run planning area? Where, when, and by whom should these facilities be acquired?

The Cub Run planning area currently has a very small residential population which is served by community facilities located in Arcola and Eastern Loudoun. Because the planning area is planned for a mix of industrial and employment-oriented land uses, there will be little need for the new schools, libraries, parks and similar facilities typically needed to serve increased populations generated by residential development. Furthermore, the Cub Run planning area, lying at the County's edge and adjacent to Dulles Airport, is not geographically

central to areas of the County where residential development is likely to occur therefore making it an unlikely location for the construction of community facilities which may be needed to serve future nearby residential populations. For these reasons, rather than seeking to establish new community facilities in the planning area, the policies in this plan are directed toward supporting and improving those community facilities and services presently serving the Cub Run planning area which will be in even greater demand as the planning area develops.

Of primary importance in the Cub Run planning area is the provision of adequate, appropriate fire and rescue services. The light and heavy industrial land uses proposed for the Cub Run planning area will create new demands for the county's volunteer fire organizations which serve the area. The nature of industrial fires can vary widely, depending upon the types of equipment or chemicals which a particular industry or manufacturer uses in daily operations. Consequently, local fire-fighters may need a considerable variety of firefighting equipment and training to meet the needs of new development in the Cub Run planning area. The policies below reflect the shared responsibility between the public and private sectors in meeting these challenges and supporting the County's volunteer fire and rescue organizations.

B. Policies

1. The County will consider the provision of fire and rescue proffers for rezonings, and as conditions of special exceptions in making its decision to approve or deny the proposals.

2. The County may require as a condition of site plans, special exceptions or rezonings, the installation of appropriate fire detection/suppression systems in new non-residential structures as determined on a case by case basis.

3. Until such time as public water service is established in the Cub Run area, new developments should provide for, or have access to, an on site emergency water supply system ad-

equately sized for the needs of structures which would be served in the event of a fire emergency. Final approval of this aspect would rest with the Director of Fire and Rescue Services.

4. During the review of rezonings, special exceptions, subdivisions and site plans in the Cub Run area, the County will encourage the provision of a minimum of two points of ingress and egress serving an employment park complex in order to facilitate fire and rescue access. The County may also require the provision of a minimum of two points of access to a particular site depending upon the intensity and nature of the proposed uses. Final approval of site ingress/egress would rest with the director of Fire and Rescue Services.

VI. Transportation Policies

A. Issue Statement and Policy Resolution

How should the transportation system in the Cub Run planning area be designed and implemented to ensure a condition of stable flow and efficient travel?

A new road network will be needed in the Cub Run planning area to support the level of development expected to occur. Therefore, the County will oversee the design and implementation of a transportation network which promotes safe and convenient vehicular traffic, reduction of long-term road maintenance costs, efficient investment of public funds, appropriate use of land and protection of water quality by reducing impervious surfaces to a minimum. Additionally, the County will seek the protection of existing residential communities in Cub Run by limiting neighborhood traffic volume, speeds, noise and fumes. The central design concept underlying County policy is one of separation of different types of travel from one another and from incompatible land uses as illustrated in Figures, 18 and 19, pages 38 and 39. A glossary of transportation terms and a summary of the road network proposed for the Cub Run planning area appear as an Appendix C to this document.

B. Policies

1. Road Policies:

a. The road network in the Cub Run area will consist of a coordinated and balanced hierarchy of roads designed to achieve the safe, efficient and functional movement of people and products.

b. All roads in the Cub Run planning area will be built to Virginia Department of Transportation (VDOT) standards to be eligible for acceptance into the State Highway system.

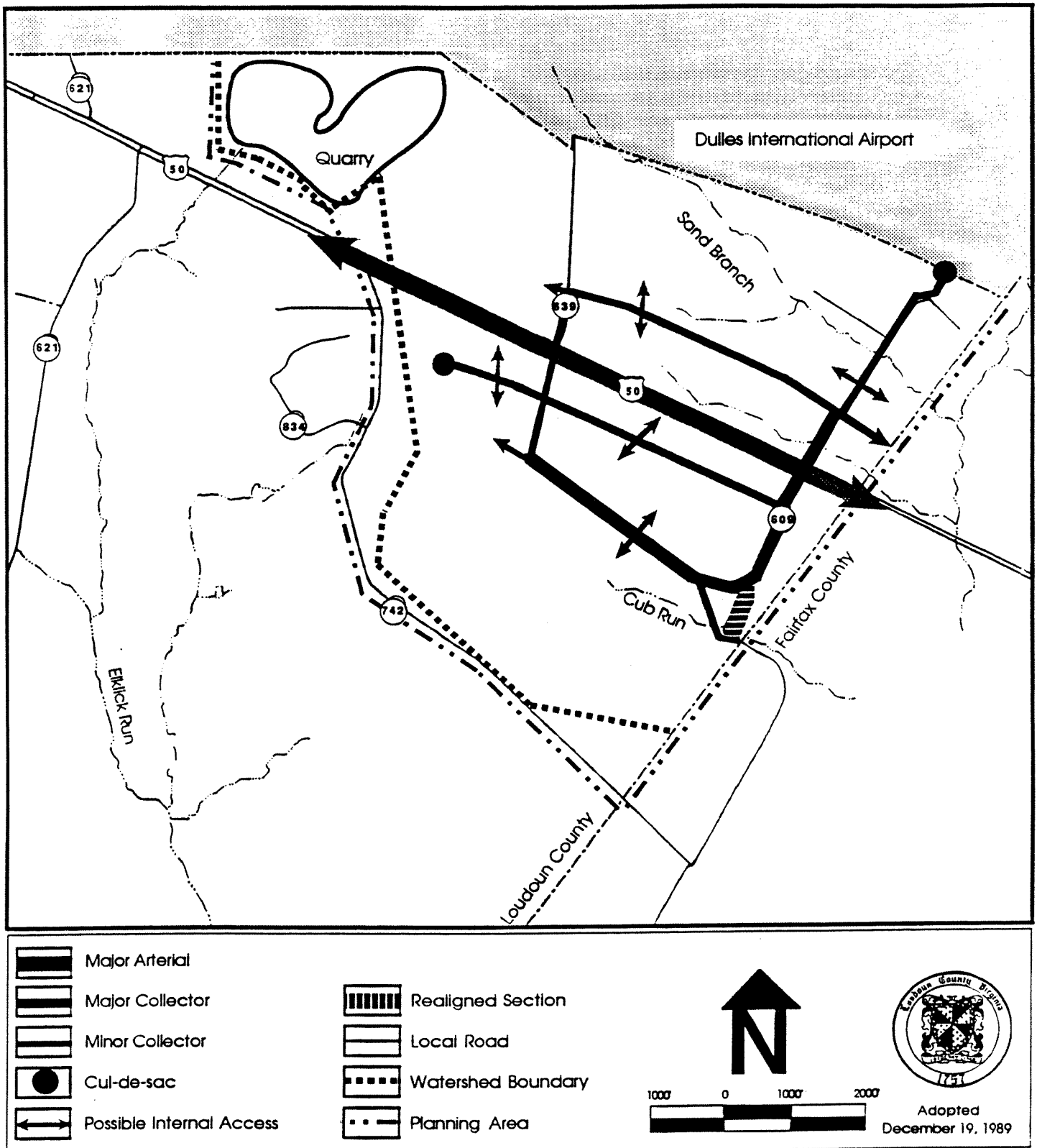
c. Arterial Roads:

i. *Designation:* Route 50 will continue to function as the major arterial transportation corridor for the Cub Run area.

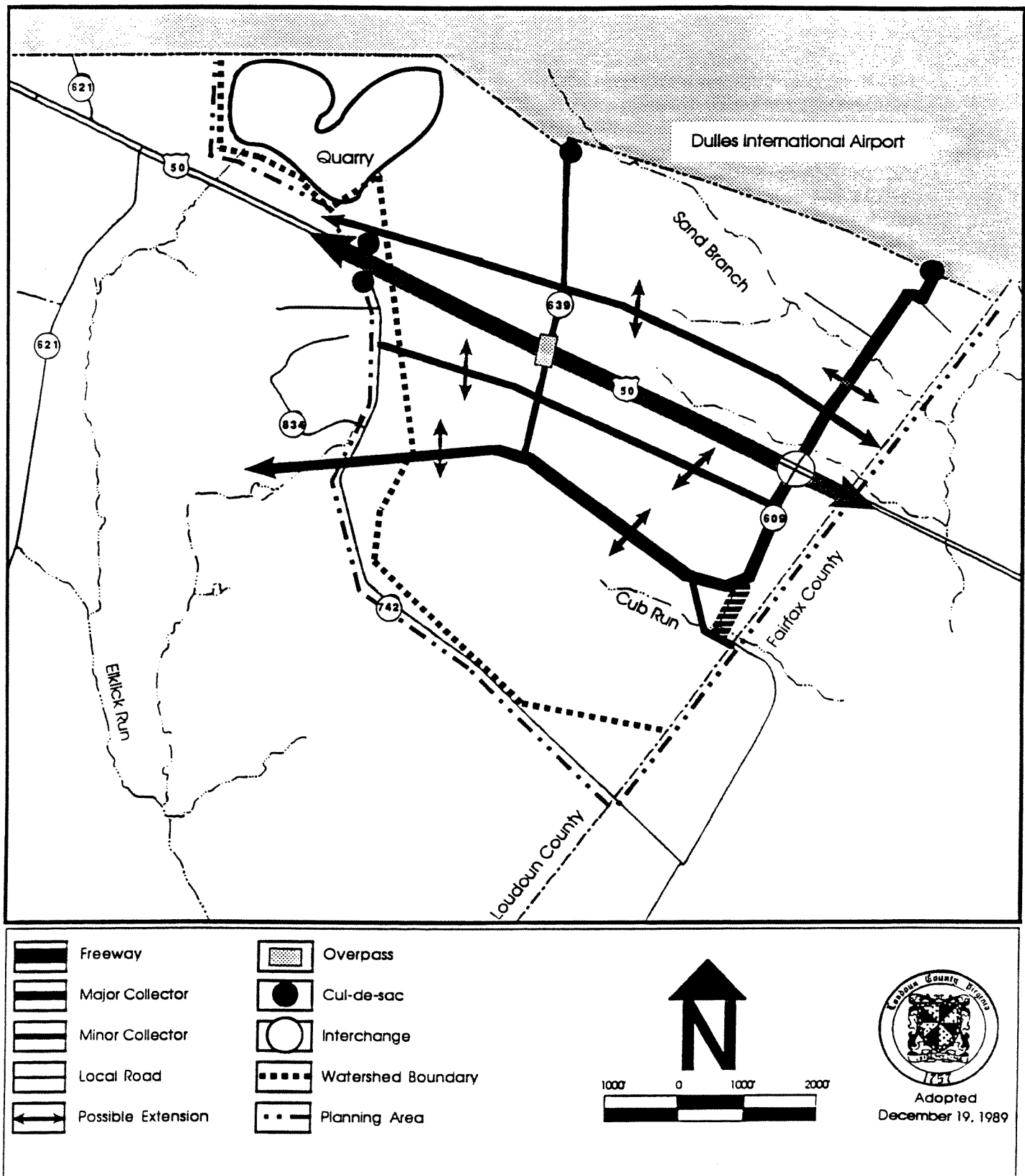
ii. *Functional Description:* In the short-term, Route 50 will be classified as a major arterial to accommodate 40,000 vehicle trips per day in a condition of stable traffic flow at traffic speeds averaging 50 miles per hour. In the long-term, Route 50 will be classified as a limited access freeway to accommodate 60,000 vehicle trips per day in a condition of stable traffic flow at traffic speeds averaging 50 miles per hour.

iii. *Design:* In the short-term Route 50 will be designed as a six-lane, median divided U6D facility with controlled access. Left and right turn lanes will be provided at all intersections. A deceleration lane shall be provided at any entrance found to be consistent with Route 50's controlled access format. Although controlled access design will be sufficient for Route 50 in the short term, in the long term limited access design will be necessary. Therefore, direct lot access to Route 50 will be prohibited where possible. Where direct access is the only option, the County will require that such access be temporary and that the development/site plan be designed so as to provide

Transportation Plan - Short Term • Figure 18



Transportation Plan—Long Term • Figure 19



for alternative access at a future time when development occurs on adjacent tracts. In the long-term, Route 50 will be designed as a six lane limited access freeway. An interchange will be provided at Route 609 west of the Cub Run area. The Route 609 interchange is intended to serve development within the Cub Run Management Area.

iv. Route 50 Landscaping and Setback Plan: A landscaping plan with a 50' foot building restriction setback from the ultimate right-of-way will be developed along Route 50 in the Cub Run area and will be implemented concurrently with development on both sides of the road.

d. Major Collector/Community "Spine" Roads:

i. Designation: The South Parallel Road to Route 50 will connect with a realigned Route 609 to provide a direct through route to Route 50 and serve as a Major Collector road in the Cub Run area.

ii. Functional Description: The South Parallel Road/Route 609, will be designed primarily to assist vehicular movement throughout the Cub Run area and not for access to individual lots. Major collector roads will be designed to accommodate 30,000 vehicle trips per day at speeds averaging 45 miles per hour in a condition of stable flow.

iii. Design: Major collector roads will be designed as four-lane, median divided U4R or R4R facilities with appropriate turning and acceleration/deceleration lanes. Access to property will not be allowed on major collector roads. Parking will not be allowed on major collector roads.

e. Major Local Access Collector Roads:

i. Functional Description: Minor collector roads conduct and distribute traffic from the major collector roads to the local access

roads and to major industrial developments and public facilities. The minor collector roads will be designed to accommodate 8,000 vehicle trips per day at design speeds averaging 40 miles per hour. The North and South Route 50 Access Roads are two of the minor collectors in the Cub Run Area.

ii. Design: Minor collector roads in industrial/employment areas will be designed to control lot access points. Minor collector roads can provide direct access to larger employment facilities if safe and stable traffic flow is ensured. Minor collector roads shall be four-lane undivided roads with U4 geometric sections. Minor collector roads will be designed to discourage through traffic from other developments and will not provide on-street parking.

f. Major Local Access Roads:

i. Functional Description: Major local access roads will provide access to abutting properties and may also conduct traffic from local access roads that intersect them. The major local access roads will be designed to accommodate a traffic volume no greater than 5,000 vehicle trips per day at speeds of 35 miles per hour.

ii. Design: Major local access roads will be designed to twice intersect a minor collector road. Geometric sections will vary according to the characteristics of the local areas being served. Curb face to curb face widths will be 40 to 48 feet depending on the nature of the specific road. On-street parking will be discouraged in the Cub Run planning area but will be evaluated on a case by case basis and could be allowed on major local access roads if two safe moving lanes are maintained consistent with VDOT standards.

g. Local Access Roads:

i. Functional Description: Local access roads will provide access to abutting properties and will be designed to carry no

more traffic than that which is generated on the road itself.

ii. *Design:* A variety of geometric sections are feasible for local access roads consistent with the nature of the area and the amount of traffic anticipated. These roads will be designed consistent with VDOT standards. (See VDOT's *Major Subdivision Street Standards and Bridge and Road Standards*.)

h. The County expects that development proposals in the Cub Run area will incorporate a hierarchical road network from local access to minor collector roads commensurate with the traffic flows associated with the proposal.

i. The County anticipates that developers in the area will construct the planned road network which, by providing vehicular access to all parts of the Cub Run Area, will benefit all local landowners.

j. The timeframe for this transportation element of the *Cub Run Area Management Plan* is 10 years for the short-term and 25 years for the long-term. The road network in the plan will accommodate build-out in those areas of Cub Run specified for employment uses and also accommodate the limited amount of development anticipated for the Route 50 corridor in the Regional Cooperative Forecasts. These forecasts do not anticipate short-term extension of sewer and water infrastructure into areas of the Route 50 corridor west of Cub Run. Should this occur, the amount of through traffic on Route 50 through Cub Run could escalate significantly and accelerate the need to upgrade Route 50 to limited access freeway status.

k. The Cub Run transportation element has a limited number of connections with the external road network with Route 50 serving a large majority of the through trips. It may be necessary to provide amplified connections to the regional road network in the future. Future updates to the Cub Run Plan coordinated with

the County's forthcoming 25 Year Transportation Plan and 10 Year Transportation Management Program or any adjacent area plans should continue to reexamine the need for and format of these amplified external road connections.

l. In considering development applications for the Cub Run area, the County will require that new buildings be so located as not to preclude the extension of any future roads or upgrading of a road which may ultimately be required, including eventual construction of grade-separated interchanges of major intersections along Route 50.

m. Median breaks on any median-divided roads in the Cub Run area shall be consistent with the desirable distances for such breaks as detailed in VDOT standards.

n. In considering development applications in the Cub Run planning area, the County will strongly encourage the consolidation of existing entrances along Route 50 and will encourage shared entrances for new development. Additionally, as development occurs in the Cub Run planning area, the County will encourage a system of interparcel access to provide an alternative means of access to parcels fronting along Route 50.

2. Shared Ride Policies:

a. The County will encourage the use of the arterial and collector network by carpools, vanpools and community buses by cooperating with metropolitan information exchange efforts.

b. The County will encourage the daytime use of portions of shopping center or other parking lots located near arterial roads by those seeking to share commuter rides.

c. The County will cooperate with the Virginia Department of Transportation in the creation of a park-and-ride lot or lots within the Cub Run Area, as part of a system of facilities in the Route 50 Corridor. These lots shall be

conveniently situated for access to Route 50.

d. The County will consider proposals to locate a community bus terminal in an employment zone if the proposed use is compatible with surrounding development and if appropriate public facilities and utilities are available to support the facility.

e. The County will consider proposals to locate trucking and bus repair facilities in the employment zones of the Cub Run area if the proposed use is compatible with surrounding development and if appropriate public facilities and utilities are available to support the facility.

3. Airport Policies:

a. The County will encourage the use and expansion of the Washington Dulles International Airport to achieve its full potential as a five runway facility.

b. The County will cooperate with the Washington Dulles International Airport authorities to research and refine effective operational procedures which will permit compatible growth of the airport and the Cub Run planning area.

c. The County will negotiate with the Washington Dulles International Airport authorities such agreements on airport operations as will ensure harmonious community development in the Dulles area.

d. The County will map present and future corridors of aircraft arrival and departure in the Cub Run planning area and will only permit land uses in these corridors which are compatible with the height, noise and vibration characteristics associated with low flying aircraft.

VII. Route 50 Corridor Policies

A. Issue Statement and Policy Resolution

The Route 50 corridor in the Cub Run planning area is one of only two major eastern entrances into Loudoun County. Here, where the roadside is relatively undeveloped and the topography is flat and open, development setbacks and landscaped buffers should be encouraged to increase road safety and to create an aesthetically pleasing visual experience. Planting and berming can be used advantageously in the planning area to lead drivers' eyes toward desirable views or, just as importantly, to screen from view areas which are distracting or unattractive. Additionally, uniform setbacks and roadside landscaping will be especially important in Cub Run for establishing a visual edge which will assist motorists in speed awareness by creating a sense of motion within a driver's cone vision. For these reasons, and to create a sense of arrival in Loudoun County, development setbacks for buildings and guidelines for landscaped buffer zones have been established along the Route 50 corridor in the Cub Run planning area.

B. Policies

1. Concurrent with the review of rezoning, special exception and site plan applications for properties bordering Route 50 in the Cub Run planning area, a minimum 50' building setback, measured from the ultimate right-of-way, will be required. Setbacks greater than 50' may be recommended depending upon the nature of the proposed land use.

2. Concurrent with the review of rezoning, special exception and site plan applications for properties located along Route 50 in the Cub Run planning area, a minimum 50' parking setback will be recommended, provided that parking areas are screened completely from view of Route 50 by means of berming and/or plant materials. Fences or walls are unacceptable screening materials for these parking area.

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3. A landscape plan indicating buffer zone widths, location of berms, and plant materials must be submitted with any site plan, special exception or rezoning application for a property located along Route 50 in the Cub Run planning area.
 4. Heavy industrial activities, particularly along the north side of Route 50, must be screened from view of Route 50 by plant materials such as evergreen trees and shrubs that will attenuate noise and provide complete visual opacity.
 5. Stormwater management ponds may not be located within the required 50' development setback.
 6. Where complete visual screening is not required, informal, attractive plantings which enhance the natural surroundings of the planning area are encouraged in order to create a park like atmosphere along the Route 50 corridor. Any areas left in a natural state must be properly maintained in an attractive, well kept condition.
 7. All plant materials located within the Route 50 development setback buffer should be tended and maintained in a healthy growing condition, replaced when necessary and kept free of refuse and debris.

VIII. Sewer Service Policies

A. Issue Statement and Policy Resolution

Should the County pursue the provision of central sewer facilities in the Cub Run Watershed? If so, how should the County implement and manage wastewater treatment to minimize public expense and plan for the future?

Because poor soils in the Cub Run planning area pose significant natural constraints to development with on-site sewage treatment facilities, the primary factor which will influence the intensity, timing and type of development in

the Cub Run planning area is central sewer service. In order for development to proceed, a central sewer system must be provided. Development in the Cub Run area is expected to have a positive fiscal impact on the County's revenue base. Therefore, expansion of utility lines into the Cub Run Watershed, contained within the planning area, is an effort to meet the needs of the development community while managing growth in a fiscally responsible manner.

B. Policies

1. The County Board of Supervisors will pursue negotiations with Fairfax County and the Upper Occoquan Sanitation Authority to serve the Cub Run Watershed through the extension of the existing Fairfax County sewer lines into the Cub Run Watershed and to acquire treatment capacity in the UOSA plant on an interim basis.
2. The County Board of Supervisors supports the concept of a pumpover from the Cub Run Watershed to the Blue Plains Interceptor or to an advanced wastewater treatment plant in the Broad Run Watershed as a means of long term sewage disposal.
3. In supporting the concept of a pumpover as specified in Section VIII, policy 2, the County will continue to rely on the Potomac Interceptor Sewer as the provider of 17.93 million gallons per day of sewage flow until such time as the new advanced wastewater treatment plan contemplated by the *Dulles North Area Management Plan* is constructed in the Broad Run Watershed with the additional capacity sufficient to accommodate the sewage generated in the Cub Run Watershed.
4. The Board of Supervisors has the responsibility to plan community facilities consonant with the efficient and economical use of public funds and to protect against undue density of population in relation to community facilities and, therefore, should future exploration and examination of sewage disposal options indicate that a pumpover is not the most practical

method for providing sewer service, the County Board of Supervisors will pursue other alternatives to provide sewer service to the area.

5. The County will encourage the Loudoun County Sanitation Authority (LCSA) to vigorously pursue the provision of central sewer and water service to the Cub Run Watershed so that such service will be in place within three years of the adoption of this plan. In the interim, the County will encourage the LCSA to provide pump and haul service to this Watershed in concert with LCSA policy.

6. In the event that the County cannot acquire or provide any means of central sewer service with sufficient capacity to service the Cub Run Watershed, the County will reexamine this plan, and, if necessary, develop a revised land use plan.

7. The County will not fund the extension of sewer lines to serve private development in the Cub Run Watershed. Line extensions will be the responsibility of the private sector.

8. The County will require the pretreatment of toxic waste from industrial land uses before these wastes are allowed to enter the main sanitary sewer system.

9. The planning and/or provision of central sewer service to the Cub Run Watershed does not make or imply any current or future commitment to provide utility services to the Elklick, Foley Branch or Upper Broad Run Watersheds.

IX. Water Supply Policies

A. Issue Statement and Policy Resolution

How should the County plan for the future water supply needs in the Cub Run area?

The type and scale of development which will occur in the Cub Run planning area will, to some extent, depend on the provision of central water service. In particular, some industrial and employment activities may require large

amounts of water which cannot be adequately provided by individual wells. Therefore, in order to anticipate and meet the development needs of the Cub Run planning area, the County will authorize the Loudoun County Sanitation Authority to pursue alternatives for providing water service to the Cub Run Watershed.

B. Policies

1. The County will authorize the Loudoun County Sanitation Authority to immediately pursue the most viable option for water service to the Cub Run Watershed, which lies in the Cub Run planning area. Preliminary findings indicate that the extension of Fairfax County water lines into the Cub Run Watershed may be the most attractive alternative for the immediate future. However, other water supply options including the use of Fairfax City's Goose Creek Impoundment, the Leesburg Potomac Intake, and construction of a new LCSA facility on the Potomac should be examined.

2. The County will not fund the extension of water lines to serve private development in the Cub Run Watershed and will require that line extensions be the responsibility of the private sector.

X. Environmental Policies

A. Issue Statement and Policy Resolution

What measures should be taken to minimize the effect of new development on the natural environment in the Cub Run planning area?

It is a challenge to integrate the changes brought on by development with the natural systems operating in the environment. Accordingly, the County will seek to ensure that development is sensitive to the critical environmental conditions which exist in the Cub Run planning area. In particular, the County will encourage the protection of vegetation, floodplains, stream valleys and the water quality of the Occoquan Reservoir. However, just as these natural elements need to be protected from

change brought on by new development, there are constraints posed by other environmental conditions (natural and man-made) from which new development should be protected. The development community in the Cub Run area will need to be regulated in order to avoid problems created by soils, airport noise, and noise and vibrations from an active diabase quarry.

B. Policies

1. Water Resources and Watershed Management Policies:

The County will continue and will supplement existing policies which seek to protect property owners by maintaining the existing watershed and watercourse system in a stable, long-term pattern. Existing floodplain ordinances designed to reduce disturbance to the streambed profile to a minimum will be maintained. Any changes to the floodplain will not be allowed to increase either the erosive velocity or height of floodwaters above or below the altered property in order to protect the property rights of adjacent landowners. Also, because the Cub Run planning area is a subwatershed of the Occoquan Watershed, the County will encourage the development of holding basins, runoff restriction sluices and the planting of vegetation belts. To control the quantity and quality of surface water runoff from new developments with their extensive impervious surfaces, the County will expect and strongly encourage the retention of all watercourses in as natural a state as possible because this is in harmony with its policy of maintaining the hydrologic patterns in a historically stable equilibrium.

a. The County will seek to preserve the 100 year floodplains (as defined in the Loudoun County Floodplain Ordinance) in their natural state and will ensure that land development and changes do not increase flooding on site or downstream beyond what would now occur in a 100 year flood.

b. The County will encourage multiple use of the 100 year floodway and floodway fringe for timber and firewood production, wildlife habitat, passive recreation and trails to the extent that these activities maintain hydrologic and ecological balance.

c. The County will encourage maintenance of perennial streams in a natural condition and will require that modifications of any dry drainageways will be accomplished in an environmentally sensitive manner.

d. Modifications to perennial streams will be allowed only in situations for which a highly significant public need is served; in such cases, the County will require restoration of the streambed and adjacent slopes to a comparable hydrological and ecological function.

e. The County will discourage all but the minimum number of stream and floodplain crossings and will encourage the use of streams and floodplains as natural divisions between differing land uses.

f. The County will manage its portion of the Occoquan Watershed to help ensure that the Occoquan Reservoir will not suffer reduction of water quality.

g. In order to control non-point source pollution, Best Management Practices (BMP's)* must be used in any agricultural operations and in any new development, including during the construction phase of such development. Additionally, the County will require the use of BMP's, such as vegetation belts and natural stream buffers, to assist in maintaining the quality and quantity of stormwater runoff.

h. The County will require the provision of appropriate stormwater catchment facilities as an integral part of any development proposal for the Cub Run planning area.

*Practice that is determined by the State of Virginia to be the most effective, practicable means of preventing or reducing the amount to pollution generated by nonpoint sources to a level compatible with water quality goals. (Source: Best Management Practices Handbook, SWCB, 1979.)

i. The County will seek to protect the quality of groundwater resources in the Cub Run planning area through the use of BMP's and the periodic monitoring of groundwater.

j. The County will not waive requirements for stormwater management facilities in the Cub Run planning area.

2. Problem Producing Soils Management Policies:

Development on problem soils, particularly the clayey, plastic soils prevalent in Cub Run could lead to cracked roads and foundations, wet basements and other situations that are very difficult and expensive to correct retroactively. Therefore, the County will continue to positively address the question of problem soils in initial development.

a. Soil conditions should be a determining factor when developers assemble a rezoning, subdivision, special exception or site plan proposal for County review. Furthermore, the County will weigh the conformance of a proposal with the underlying soil conditions in decisions to approve or deny the proposal.

b. The County prefers the use of building types, materials and practices which will reduce potential soil related problems for future users to a minimum.

c. The County will not permit the location of sanitary or debris landfills in the Cub Run planning area due to the potential problems with subsurface and surface drainage, grading and excavation of these soils and due to the location of the planning area in the environmentally sensitive Occoquan Watershed.

3. Noise Management Policies:

As Dulles International Airport continues to expand its operations and as development occurs in those areas of Cub Run planned for industrial employment, noise levels in the planning area will rise significantly. In order to

minimize the effect of this increasing nuisance on the residential and working populations of the Cub Run area, the County will not permit the development of noise sensitive land uses in the air corridors used by low flying aircraft enroute to or from Washington Dulles International Airport. Buffer zones, berms and vegetation belts between conflicting uses will be the preferred technique of ensuring community harmony between uses which are not completely noise compatible.

a. The County will continue to negotiate with the Washington Dulles International Airport authorities to refine airport operations and aircraft arrival and departure routes in order to minimize the effects of noise on noise sensitive land uses.

b. The County will institute review procedures for proposed new noise sensitive land uses such as offices located within the projected Ldn 65+ noise zone . Approval for noise sensitive uses will be subject in part to the installation of noise attenuation measures in the fabric of the structure.

c. The County will seek to buffer noise sensitive land uses, such as residences, from noise generating uses, such as industrial employment, in order to reduce noise based community frictions.

d. The County will establish appropriate buffering, berm and vegetation planting standards to minimize the effects of traffic or noise generating land uses on noise sensitive land uses.

4. Vegetation and Wildlife Management Policies:

"Trees and other vegetation: help stabilize the soil and prevent erosion; decrease storm-water run-off and maintain water quality through canopy interception and root zone absorption; aid in energy conservation and human comfort through the moderation of temperature extremes and provision of shade

and windbreaks; provide buffers and screens that help to reduce noise and air pollution; filter pollutants from the air; assist in groundwater recharge; contribute to the reduction of flood magnitudes; provide important psychological, social and aesthetic benefits in urban and suburban areas; function as integral components of the natural eco-system and serve as a habitat for various animal and bird species which in turn assist in the control of insect populations; and tend to conserve and increase property values.”*

a. “... It is the policy of the Loudoun County Board of Supervisors to preserve and protect the existing natural vegetation of the County to the maximum practical extent.”**

b. “The Loudoun County Board of Supervisors shall implement this policy by amendment to existing ordinances and adoption of new ordinances and regulations and by incorporation of adequate vegetation analysis into all aspects of the County Planning, zoning and land development process.”***

c. Existing vegetation should be a significant factor when developers assemble a rezoning, subdivision, special exception or site plan proposal for County review. Furthermore, the County will weigh the conformance of a proposal with the existing vegetation in decisions to approve or deny the proposal.

d. Where development is proposed on a tract which has open space as well as wooded areas, the County will recommend development be located in the open space contingent upon soil suitability.

e. Where existing vegetation is disturbed in development, indigenous or ecologically compatible species should be used in landscape restoration.

5. Natural Resource Extraction Policies:

The Cub Run area is the source of some of the highest quality diabase rock available on the East Coast. Quarrying is a prominent local industry which supplies diabase, an important road building and construction material, to the rapidly growing Metropolitan Washington area. Despite the important resources which quarries provide, they make difficult neighbors for most other land uses. The County will seek to protect quarries operating in the Cub Run planning area by taking measures to ensure that nearby future land uses in the area are compatible and that environmental and safety standards are observed.

a. The County will not allow mineral extraction activities to be visible from the Route 50 corridor.

b. The County will allow mineral extraction in areas designated for general industrial uses if the proposed activity demonstrates benefits to the local economy while ensuring protection of existing and planned neighboring uses from such dangers as economic, safety and health hazards and the environment from short and long-term degradation.

c. The County will require the submission and approval of a development-exploitation plan and a reclamation plan prior to issuance of a zoning permit allowing the expansion of an existing mineral extraction operation.

d. The County will encourage creative solutions for the reclamation of mineral extraction sites such as recreational facilities, emergency water supplies or deposit sites for clayey plastic soils stripped for construction purposes.

* Loudoun County Vegetation Preservation Policy adopted May 4, 1981.

** *ibid.*

*** *ibid.*

XI. Historic Resource Policies

A. Issue Statement and Policy Resolution

What efforts should be undertaken to conserve the area's archaeological and historical heritage as new development occurs?

Only a small number of structures in the Cub Run planning area have been surveyed for historical significance. Therefore, as the area begins to develop, it is important that the survey process for existing structures and sites suspected of having archaeological or historical significance to the County or the Cub Run area be continued. New development in the Cub Run area should be located in a way which will enhance and respect existing historical structures. A clear spatial boundary between the new and the old such as a landscaped screen of vegetation is preferred. New developments in close association with the old should not generate negative off-site traffic, parking or other effects which would be detrimental to archaeological remains, historic structures and general character of the area.

B. Policies

1. Protection of archaeological sites and historic structures and groups of structures will be sought and encouraged by the County at the time of land rezoning, subdivision, special exception and site plan review and development.
2. A transition zone between new development and archaeological sites and historic structures and groups of structures will be sought by the County during review of new development proposals. The retention of adjacent existing woodlands and/or vegetative screens will be strongly encouraged.
3. Individuals, organizations, groups and members of the development community will be encouraged by the County to identify, research and preserve archaeological sites and historic structures or groupings of historic structures which contribute to the local culture and archaeological past of the County and the Cub Run area. The County will assist in such efforts by providing the use of its historic files and liaison assistance commensurate with the County's resources and ability to provide such aid.